Natura 2000 and Forest Management
‘a practitioner’s perspective’

Christian Berner, Forest Manager of Vienna’s Archbishopric
University of Agriculture - Master of Forest Science (master thesis: Ideology of nature and environment protection)

1986-1990 Employee-Austrian Landowner Association (business economics)
1991-present Forest manager – archbishopric of Vienna

Forest educator and certificated nature guide
Examiner-state examination for forester
Membership in numerous committees and panels (forestry, hunting fishing, forest economics, tourism, forest employers association)

Selected Projects: Wood Grouse Habitat, Black Grouse Habitat, European Otter and fishery damages

Awards:
2011 forest treasury award-BIOSA (Import Bird Area “Steirisches Joglland” wood grouse habitat management)
2012 Austrian state award – exemplary forest management
2015 PEFC award

Apart from general forest management, my special interests are forest inventory, forest stands and optimal stem numbers and planting of foreign tree species
Facts about our forest Enterprise in Austria:
Archbishopric is a part of the roman catholic church
Founded in 1469 and donated to Vienna’s archbishop
‘Land & Forst’ is one profit centre of the archbishopric

Area: 5,600 ha situated in mountain areas between 600 and 1700 m
Tree species: 92% spruce
1% fir
3% larch
1% hardwood
4% pine
1% douglas fir an other non domestic tree species

Annual logging: 35,000 fm
Employees: 1 forest manager, 3 foresters, 10 forestry workers,
2 office assistants

More than 50% of our stands we can only harvest with cable cranes
(incremental costs of 7 €/fm minimum)
Financial target: optimal sustainable profits for financing episcopal affairs
area of forest (5600 ha)
Facts of Austrian forests:
ownership structure
17% publicly owned forest
55% private owner < 200 ha
33% private owner > 200 ha

Focus on financial targets: make profit

Implementation of restrictions-compensation payments
- in private forests contracting is preferred versus law acts

Problem: nature conservation authorities have low budgets

Germany
52% publicly owned forest
48% private owner

Focus on public welfare: it is possible to take a loss

Implementation of restrictions: law act
- Public forests are obliged, private owners can do it optionally

Problem: today’s public forests are encouraged to make profits

CONFLICTS ARE PREPROGRAMMED

objectives of the European Union are contradictory

- more use of biomass vs. biodiversity
- more wood use means better quality of saw logs vs. old mature stands (thick trees with poor quality)
Negative example:

Protection of European otter
generated chaos in Austrian creeks
law act-top down

Positive example:

Protection of wood grouse habitat
conserve courtship territory
private contracting-bottom up
Feistritz Creek-Lower Austria
Side creeks:
Massive controlled structures
Main creek:
Structures are better—but 3 hydropower stations exist
Ecological Disaster

Feistritz: Bestand der 3 Teststrecken

- Reduction of fish stock from 180 kg/ha to 30 kg/ha
- Fish stock is not structured - it is not in a good state of preservation
- Otter population: 4 residents, 4 transients, 2 immigrants

Simple Calculation

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<th>Fischlänge (cm)</th>
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Fishing limit

Otter population:
- 4 residents
- 4 transients
- 2 immigrants

1 Otter average 6/year

- 0.75 kg/day x 365 days = 1642.5 kg fish
- 180 kg/ha x 10 ha = 1980 kg fish
- 33.75 kg/ha x 337.5 = 11663.125 kg fish

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In Lower Austria sale of fishing licences decreased dramatically

fishing rents account for a decrease of 30-50%

Side effect: in Feistritzvalley, about 50 small pools existed; most of them are closed (average 50 trout per 0,25 kg=625 kg)
Consequences

Research Otter population and Fish Stock: 4 creeks in lower Austria: costs= € 225,000 predominately paid by the fishing association

Research Otter population in Lower Austria: estimate between 400 and 1200+ otters (costs unknown)

Legal act: Otter changes from hunting law to nature protection law (regulation gets more and more difficult)

Recommendation to install an otter management system (monitoring and reduction: when, who, how, payment, communication…)
Beginning?

Landowners have to endure the reduction of fish stock without compensation payment (part of their social responsibility)
RESULTS

otter stock- good ecological status of preservation (FFH-directive)

tROUT stock- bad ecological status of preservation (water framework directive)

There is no balance between otter and trout and sustainable use by human beings.

According to Article 2.3 of the Habitats Directive, measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics. The Directive fully recognises that man is an integral part of nature and that nature conservation measures and socio-economic activities are best carried out in partnership. The aim of Natura 2000 is not to prevent economic activities, but rather to set the parameters by which these can take place whilst safeguarding Europe’s most valuable species and habitat types.
Collapse of fish stocks and especially that of the representative trout coincides with the repopulation the otter. Page 85

Tabelle 49. Überblick der Belebungstrachten, an denen die Gesamtbiozönose (auß. Kleinfischarten) im Spätsommer 2014 oder im Frühjahr 2015 das KO-Kriterium von 50 kg/ha (orange) bzw. 25 kg/ha (rot) der Fischökologischen Zustandsbeurteilung unterschritt.

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<th>Fluss</th>
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<th>Öts-Zubringer</th>
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Before repopulation of otter all creek had good fish stock with KO-criteria >50 kg/ha

- good fish ecological condition
Conclusion: unsatisfactory situation
NOTICE: DISCUSSION IN 9 AUSTRIAN FEDERAL STATES is not consistent
Wood Grouse Management
Styrian Joglland
Natura 2000-pilot project
Forest Enterprise-Management Objectives

- **Tourism**
  regulation and control of tourism activities in our forests by
  planning involvement
  project co-determination

- **Nature protection**

  Proactive determination-partner contracting
Owners’ Considerations and Recommendations

- Claiming to remove area from nature2000-no chance of success
- Searching for partners and acting according to our management objectives
- Found partners: BIOSA and Styrian nature conservation department
- Choose area and develop project
Project Area (50 ha 1200-1400 m)

- Cross country ski track
- Footpath
- Black grouse prohibited area during winter
- Birkenwäldergebiet

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Pilot Project “promoting and conserving arrangements for wood grouse”

- Project targets:

- Short range:
  - Conserving and upgrading stock of wood grouse habitats and accompanying arrangements to upgrade suitable stands
  - Conserve courtship territory for 20-30 years
  - Regulation of predator stock (fox, martens, wild boar, buzzards)-not allowed
  - Cutting older mature stands to create spacious young stands

- Long range
  - Continuous thinning of young and middle aged stands, these stands will build wood grouse habitats in future
IMPLEMENTATION

BIOSA created a contract and carried out negotiations with Styrian officials

• No cutting of mature stands (notice: natura reduction of stem number of about 1%/year)

• Other stands- cutting outside breeding and rearing times

• Young stands- powerful reduction of stem number

• Spruce planting and additional planting of larch

• First thinning in time

• keep deadwood, conservation of anthills, predator regulation, build shelters, monitoring and documentary reports
In existing wood grouse habitat:

Independent project development
expert involvement-Prof. Zeiler

Last thinning-ca. 50 ha-we openend up to stand density 0.5; no natural seeding during one year to prevent rapidly regeneration of stand
Target: no natural regeneration of stands in next 20-30 years
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Take care of anthills

Arrange tree tops to build shelters
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ERZBSTUM WIEN
Forstamt Kirchberg am Wechsel

attention anthills

keep deadwood
Build small open spaces with raspberries and blueberries
Stands of minor density – wood grouse can pass stands easily without barriers
Building water outflow under forest roads

Wood grouse hens prefer breeding beneath forest roads
No servicing of forest roads during breeding and rearing

Building shelters
Contracting-compensation payment

- Administration costs-contribution
- No logging in mature stands
- Complications in our economic activities
- More storm-damaged wood, keeping dead wood-increased risk of beetle calamity, take care of anthills
- After contracting, costs for harvesting are higher because of minor density stands and loss of timber increment
RISKS

- Weather conditions during breeding
- Thoughtless tourists - drift from foot paths, especially in winter
- Climate heating - more storm damaged wood - rapid loss of stand density - habitat decline - limited alternative habitats
- Prohibit trap hunting - increase of predators
- Hunting association barely supports our activities
- PROHIBIT COURTSHIP HUNTING IN SPRING
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Storm damaged wood
Facts for our success:

Bottom up—we have identified a target with Nature 2000

We are the project manager

High confidence between partners

Slim administration

Low costs because other managing arrangements are included in our daily work

Project audit by officials
BUILDING BRIDGES was the guiding theme for the EUROVISIÓN SONG CONTEST in Austria in 2015 and I hope building bridges between forest economic management and nature sciences will be a guiding theme in 2016 for a successful outcome of network Nature 2000.